Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method comprising:

providing an interface to store data ~~independent of~~ for multiple data storage mechanisms, the interface having a plurality of ~~generic~~ routines commonly shared by the data storage mechanisms;

upon receipt of a request to store state data of a virtual machine, the request received from an application executed by the virtual machine: ~~, calling the generic routines as a function of one of the data storage mechanisms; and~~

~~executing the called routines to store the data according to the one of the data storage mechanisms,~~

~~wherein the interface provides a unique identifier associated with the data to store with the data in persistent storage~~.

identifying a storage mechanism referenced by the request;

using the routines, storing the state data on the identified storage mechanism;

assigning a unique identifier to the stored state data;

indexing the stored state data with the unique identifier; and

after a failure of the virtual machine, recovering the stored state data based on the unique identifier.

2. (Original) The method of claim 1, wherein the providing an interface includes:

providing a plurality of parameters to define the data storage mechanisms.

3 – 5. (Canceled).

6. (Currently amended) The method of claim 1, wherein the data storage mechanisms include byte array read/write, file I/O, and Java Database Connectivity (JDBC).

7 – 10. (Canceled).

11. (Currently amended) A method comprising:

~~providing a persistence class to include generic routines to read or write data in persistent data storage independent of data storage mechanisms;~~

receiving a request to read or write ~~the data~~ state data of a virtual machine, the request received from an application executed by the virtual machine;

~~determining which of the~~ selecting a data storage ~~mechanisms~~ mechanism to use;

if the request is a data write,

~~instantiating the persistence class to create a persistence object specific to the determined data storage mechanism,~~

~~using the persistence object to instantiate an entity class to create~~ creating a persistence data object into which to write the data ~~to make the data persistent~~,

assigning a unique identifier to the persistence data object;

writing the state data into the persistence data object;

storing a record of the unique identifier and the persistence data object;

directing an operating system to access the data storage, and

writing the data object to the data storage according to the determined data storage mechanism; and

if the request is a data read,

~~instantiating the persistence class to create a persistence object specific to the determined data storage mechanism,~~

~~using the persistence object to instantiate an entity class to create~~ creating a persistence data object to be loaded with the data ~~to make the data persistent,~~

directing an operating system to access the data storage, ~~and~~

locating state data to be read based on a unique identifier associated with a stored persistence data object; and

loading the state data from the stored persistence data object into the created persistence data object according to the determined data storage mechanism.

12 – 15. (Canceled)

16. (New) A computer-readable medium storing instructions which, when executed by a processor, cause the processor to perform a method comprising:

providing an interface to store data for multiple data storage mechanisms, the interface having a plurality of routines commonly shared by the data storage mechanisms;

upon receipt of a request to store state data of a virtual machine, the request received from an application executed by the virtual machine:

identifying a storage mechanism referenced by the request;

using the routines, storing the state data on the identified storage mechanism;

assigning a unique identifier to the stored state data;

indexing the stored state data with the unique identifier; and

after a failure of the virtual machine, recovering the stored state data based on the unique identifier.

17. (New) A computer-readable medium storing instructions which, when executed by a processor, cause the processor to perform a method comprising:

receiving a request to read or write state data of a virtual machine, the request received from an application executed by the virtual machine;

selecting a data storage mechanism to use;

if the request is a data write,

creating a persistence data object into which to write the data,

assigning a unique identifier to the persistence data object;

writing the state data into the persistence data object;

storing a record of the unique identifier and the persistence data object;

directing an operating system to access the data storage, and

writing the data object to the data storage according to the determined data storage mechanism; and

if the request is a data read,

creating a persistence data object to be loaded with the data

directing an operating system to access the data storage,

locating state data to be read based on a unique identifier associated with a stored persistence data object; and

loading the state data from the stored persistence data object into the created persistence data object according to the determined data storage mechanism.